

38. The method of Claim 37, further comprising providing additional information associated with the response to the message query concerning the computer resources.

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39. The method of Claim 37, further comprising providing additional information associated with the response to the message query concerning when the resource is expected to become available.

40. The method of Claim 38, wherein the additional information provided comprises a text message.

41. The method of Claim 37, wherein the heartbeat is monitored by a primary master name server for a zone of a communications network comprising the computer resources.

42. The method of Claim 37, wherein the heartbeat is generated by at least one computer within a domain name zone.

REMARKS

Claims 9 through 31 of the above-referenced application have been canceled, leaving Claims 32 through 36 pending. In addition, Claims 37 through 42 have been added. Applicant has carefully considered the application in view of the Advisory Action of January 3, 2002, and respectfully requests reconsideration of Claims 32 through 36 and allowance of all pending claims, in light of the following remarks.

Claims 32 through 36 stand rejected under 35 U.S.C. § 103(a), allegedly being unpatentable over U.S. Patent No. 6,178,439 to Feit ("Feit"). Applicant respectfully traverses this rejection and requests full allowance of Claims 32 through 36. As is discussed in more detail below, Feit neither discloses nor suggests use of a heartbeat as an indication of available computer resources. Instead, Feit discloses only use of a heartbeat to indicate time spent viewing a web page. No reference cited in addition to Feit fills the void in Feit. Reconsideration of Claims 32 through 36 in light of the limited disclosure of Feit and allowance of such claims is earnestly solicited.

Rejected independent Claim 32 recites at least one of the distinguishing characteristics of the present invention, namely, that *the heartbeat messages indicate the*

availability of resources on one or more computers and that the loss of the heartbeat messages indicate the unavailability of the resources on one or more computers.

Feit was cited as assertedly fully disclosing Applicant's invention as claimed in the independent claims, except merely for disclosing that the loss of heartbeat from the selected computer is indicative that all computer resources are unavailable, for which the Examiner asserts is obvious. Feit, however, *fails to teach or suggest the use of heartbeat messages to indicate the availability and/or unavailability of resources on one or more computers.* In contrast to the Applicant's invention, Feit assertedly discloses the use of a heartbeat message to indicate that a client is viewing a page obtained from a server. Upon loading the page by a client, a script that sends a heartbeat message at predetermined intervals is also transferred to the client. As long as the client is viewing the page, the script continues to send the heartbeat messages. This provides the server with the approximate times that the client is viewing a web page.

The heartbeat message in Feit, however, does not indicate that resources are available, and, importantly, the absence of the heartbeat message does not indicate that resources are not available. The heartbeat message in Feit only indicates that a client is viewing a particular page. The absence of the heartbeat message, therefore, only indicates that the client is not viewing the particular page, and it cannot be determined from the heartbeat message in Feit if another user is accessing the page, if no one is accessing the page, if the server is unavailable, or the like. Moreover, the heartbeat message fails to indicate whether other computer resources are available.

Furthermore, the presence of the heartbeat message in Feit does not indicate that the resources are available. For example, a client may have downloaded a particular web page and begun transmitting a heartbeat message. In the meantime, however, the server or source of the information may have failed, and the information may no longer be available. In such a situation, the heartbeat message may continue to be sent when the information or resources are no longer available.

In contrast, Applicant's invention as claimed utilizes a heartbeat message to indicate the availability or unavailability of computer resources. A heartbeat message is sent when the computer resources are available, and no heartbeat message is sent when

the computer resources are unavailable. This allows for a computer network to be dynamically connected and disconnected to another network, such as the Internet, and the availability of computer resources within the computer network to be dynamically determined. (*Application, pages 15-17.*)

Furthermore, Applicant traverses the Examiner's statement in paragraph 10 of the Office Action that asserts that Applicant's invention would be obvious to one of ordinary skill in the art in light of Feit. In particular, the Examiner's statement that "Feit's heartbeat would improve the integrity and reliability by providing heartbeat message periodically to the server to identify when the client has finished using a particular record or how long the user viewed a particular record" is confusing. Assertedly, the feature cited by the Examiner ("identify when the client has finished using a particular record") relates to Feit, not to Applicant's invention, and, therefore, it is unclear how Applicant's invention is obvious in view of Feit.

In view of the foregoing, it is apparent that the cited references neither teach nor suggest the unique combination now recited in independent Claim 32. It is therefore submitted that Claim 32 clearly and precisely distinguishes over the cited references in a patentable sense, and is therefore allowable over those references. Accordingly, it is respectfully requested that the rejection of Claim 32 under 35 U.S.C. § 103(a) as being unpatentable over Feit be withdrawn.

Claims 33-36 depend from and further limit independent Claim 32 in a patentable sense and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance. Accordingly, it is respectfully requested that the rejections of dependent Claims 33-36 be withdrawn as well.

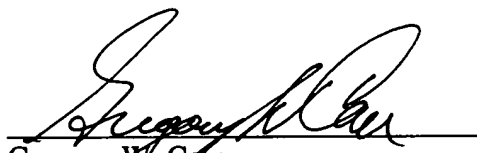
New Claims 37 through 42 are directed to monitoring a heartbeat, determining from the heartbeat whether computer resources are available and responding to a query for those resources that the resources are unavailable if the heartbeat is not present. These features are neither disclosed nor suggested by Feit or any other reference cited. Accordingly, allowance of Claims 37 through 42 is earnestly solicited.

Applicant has now made an earnest attempt to place this application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 32 through 42.

Should the Examiner have any questions or desire clarification of any sort, or deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

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